MATERIAL

Product: NICKEL SULFATE, SPEC 101 (SINGLE NICKEL SALTS)

SUPPLIER IMPORNATION

Common Name

: NICKEL SULFATE HEXAHYDRATE Chemical Name : NICKEL SULFATE HEXAHYDRATE

Formula

: Niso4-6H2O

Product CAS # : 7786-81-4

Supplier

: M & T HARSHAW

Address

: 1000 HARVARD AVENUE

City, St, Zip : CLEVELAND, OH 44109 Phone

: 1-800-752-8464

SECTION II

HAZARDOUS INGREDIENT INFORMATION

INGREDIENT

* Wt. PEL-OSHA

EMERGENCY PHOME #: 1-800-424-9300

TLV-ACGIH

NICKEL SULFATE HEXAHYDRATE

CAS #: 7786-81-4

 0.1 mg/m^3 60-100

Soluble Ni

 0.1 mg/m^3

as soluble Ni

INGREDIENT HAZARD STATEMENT

SUSPECT CANCER HAZARD - Risk of cancer depends on duration and level of

Causes eye, skin and respiratory tract irritation. May cause allergic skin and respiratory reaction. Harmful if swallowed.

Unless otherwise noted, all values are reported as 8-hour Time-Weighted Averages (TWAs) and total dust (particulates only). All ACGIH TLVs refer to the 1989-90 Standards. All OSHA PELs refer to 29 CFR Part 1910 Air Contaminants: Final Rule, January 19, 1989.

SECTION III

PHYSICAL/CHEMICAL CHARACTERISTICS

Boiling Point: Not applicable Specific Gravity (H2O=1): 2.07 Melting Point: Not applicable

Vapor Pressure (mm Hg): Not applicable Vapor Density (Air=1): Not applicable Evaporation Rate (Butyl Acetate=1): Not applicable % Solubility/Water: 62.5 g/100 cc at 0°C

APPEARANCE AND ODOR

Green crystals; odorless

SECTION IV FIRE AND EXPLOSION HAMAED DATA

Flash Point: Not available Auto-Ignition: Not available

LEL: Not available UEL: Not available

NYPA HAZARD CLASSIFICATION

Health: 1

Flammable: 0

Reactivity: 0

HMIS HARARD CLASSIFICATION

Health: 2*

Flammable: 0

Reactivity: 0

EXTINGUISHING MEDIA

Use water, carbon dioxide or foam.

SPECIAL FIRE FIGHTING PROCEDURES

None expected.

UNUSUAL FIRE AND EXPLOSION HAZARDS

Not a fire or explosion hazard.

SECTION V REACTIVITY DATA

Stability: Generally considered stable. Avoid: None expected.

INCOMPATIBILITY (Materials to Avoid)

None expected.

HAZARDOUS DECOMPOSITION OR BY-PRODUCTS

None expected.

Polymerisation: Polymerization is not expected to occur. Avoid: Not applicable.

SECTION VI HEALTH HARARD DATA

ROUTES OF ENTRY

Eves? YES

Skin? YES Inhalation? YES Ingestion? YES

EFFECTS OF OVEREXPOSURE

EYE CONTACT causes irritation.

SKIN CONTACT causes irritation and sensitization or allergic reactions which may be accentuated by heat and humidity.

INHALATION may cause upper respiratory irritation. Individuals hypersensitive to NICKEL may develop asthma, bronchitis, shortness of breath or wheezing.

INGESTION is harmful.

CARCINOGENICITY

NTP? YES

IARC? YES

OSHA? NO

NICKEL and certain NICKEL COMPOUNDS, including NICKEL OXIDE and NICKEL CARBONATE, are listed as carcinogens by the National Toxicology Program and the International Agency for Research on Cancer.

CHRONIC HEALTH HAZARDS

Refer to Carcinogenicity.

MEDICAL CONDITIONS GENERALLY AGGRAVATED BY EXPOSURE

May aggravate existing medical conditions such as allergies, dermatitis, asthma, bronchitis or any other respiratory ailment.

EMERGENCY AND FIRST AID PROCEDURES

EYE AND SKIN CONTACT: Immediately flush eyes with plenty of water for at least 15 minutes. Call a physician. Flush skin with water.

INHALATION: Remove to fresh air. If breathing is difficult, give oxygen. Call a physician.

INGESTION: If swallowed, induce vomiting immediately as directed by medical personnel.

SECTION VII PRECAUTIONS FOR SAFE HANDLING AND USE

EPA Waste #: Not regulated

UN #: NA 9188

DOT Classification: RQ, Hazardous substance, solid, N.O.S. (Nickel Suifate)

STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED

Contain spillage and scoop up or vacuum. Avoid dusting. Notification of the National Response Center (800/424-8802) may be required. Refer to EPA, DOT and applicable state and local regulations for current response information.

It is recommended that each user establish a spill prevention, control and countermeasure plan (SPCC). Such plan should include procedures applicable to proper storage, control and clean-up of spills, including reuse or disposal as appropriate (see waste disposal method, below).

WASTE DISPOSAL METROD

Federal, state and local disposal laws and regulations will determine the proper waste disposal procedure. All waste materials should be reviewed to determine the applicable hazards (testing may be necessary). Disposal requirements are dependent on the hazard classification and will vary by location and the type of disposal selected. Some waste materials are amenable to recycle/reuse.

PRECAUTIONS TO BE TAKEN IN HANDLING AND STORAGE

Wash thoroughly after handling. Keep container closed.

PERSONNEL SAMPLING PROCEDURE

For NICKEL: Refer to NIOSH Manual of Analytical Methods, 3RD Edition, Volume 1, Method 7300.

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RESPIRATORY PROTECTION

A NIOSH/MSHA-approved respirator as necessary.

VENTILATION

General; local exhaust ventilation as necessary to control any air contaminants to within their TLVs during the use of this product.

PROTECTIVE EQUIPMENT

Chemical goggles as needed to prevent irritation. Rubber or neoprene gloves. Body protection as necessary to prevent skin contact.

WORK/HYGIENE PRACTICES

Avoid breathing dust. Avoid contact with eyes, skin and clothing. Use only with adequate ventilation.

SECTION IX FEDERAL AND STATE REGULATIONS

SARA HAZARD CATEGORIES

IMMEDIATE (Acute) Health Hazard: YES DELAYED (Chronic) Health Hazard: YES FIRE Hazard: NO REACTIVITY Hazard: NO

Sudden Release of PRESSURE: NO

SARA SECTION 313 NOTIFICATION

This product contains a toxic chemical (or chemicals) subject to the reporting requirements of Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 and 40 CFR Part 372.

CHEMICAL NAME

CAS

* Wt.

NICKEL SULFATE HEXAHYDRATE

7786-81-4

60-100

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